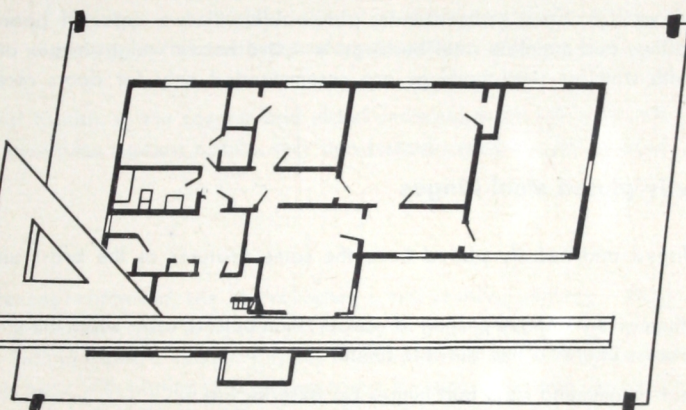


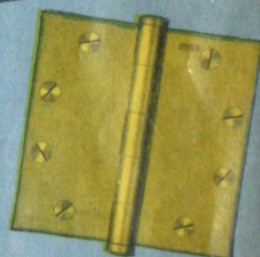
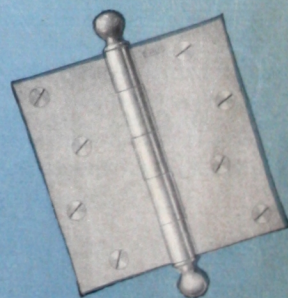
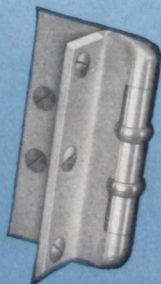
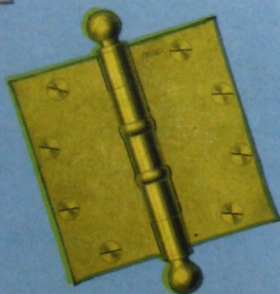
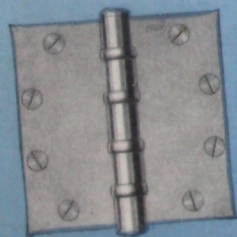
STANLEY HINGE GUIDE

®

A HOUSE IS AS GOOD AS ITS HARDWARE



SPEC.—THREE HINGES TO A DOOR



THE STANLEY WORKS • NEW BRITAIN, CONN.

A. I. A. FILE NO. 27B

A. I. A. FILE NO. 27B

metals obtainable

wrought steel
wrought brass
wrought bronze

wrought white bronze
wrought stainless steel
wrought aluminum

the metals used in making Stanley wrought hinges are cold rolled, which toughens and hardens the metal for brass or bronze metals, in finishes other than natural, we reserve the option to use brass or bronze metal

wrought brass or bronze hinges

recommended for interior or exterior doors

they are polished and finely finished • the inner edges of the leaves (on types 192½, 175, BB180, BB181, etc) are beveled to make close-fitting joints • the outer edges are true and the corners are square • the pins are made of stainless steel and the shoulders of the tips fit flush with the barrel

hinges made of standard weight wrought brass or bronze are obtainable with two types of bearings to eliminate vertical wear: namely, ball bearings and stainless steel bushings • extra heavy weight hinges are furnished only with ball bearings • hinges with stainless steel bushings are recommended only for doors receiving infrequent service

highly polished and heavily plated steel hinges

recommended for interior doors

hinges described as highly polished and heavily plated have the same features as the brass and bronze hinges referred to above

the steel is first highly polished, then given a heavy plating of copper, then buffed, after which the final finish is plated with a heavy deposit • this process insures a fine durable finish

despite heavy plating, we do not recommend steel butt hinges for exterior use

polished and plated steel hinges

recommended for interior doors

hinges described as polished and plated do not have the refinements of those which are described as highly polished and heavily plated • the steel is polished, then plated in the finish desired

planished and plated steel hinges

recommended for interior doors

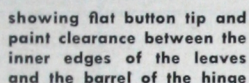
hinges described as planished and plated are for use where a good practical steel hinge is desired and a planished surface will meet the requirements • the steel has a fine cold rolled finish, although not wheel polished

ball bearing hinges (for features, see page 17)

recommended for heavy doors, doors receiving high frequency service and doors where silent operation is required • they should always be used on doors equipped with door closers, hollow metal and kalamein doors

there is no wearing down of the hinge under the severest strain and doors operate easily and noiselessly • the ball bearings being permanently lubricated, need no further oiling

the ball bearings are permanently attached to the knuckles so that they cannot be lost when the leaves are taken apart



hinges for painting are first bonderized then prime coated • the bonderizing forms a strong bond between the metal and the prime coat, thereby preventing paint from peeling or flaking • ample paint clearance is provided between the barrel and the inner edges of the leaves • when desired they can be obtained with a rust-resisting base

furnished with flat button tips which fit flush with the barrel of the hinge

on white bronze metal, chromium plating is applied directly to the metal • on brass or bronze metals it is applied over a heavy plating of nickel • on highly polished steel hinges it is applied over a heavy plating of nickel on top of a double plate of copper • this method conforms strictly to government requirements as listed in Federal specifications

chromium does not tarnish • the copper and nickel underneath the chromium affords considerable rust protection but for absolute assurance against rusting, only non-ferrous metals should be used

(not guaranteed against rust)

on steel hinges (except chromium, see above) when a rust-resisting coating is desired in addition to the decorative final plating, we will furnish what is considered to be the best protective undercoating • our laboratory tests and field experience indicate that a double plating of copper is a most effective and practical base plate, however, we intend to keep pace with plating and anti-corrosive developments and should some other finish prove more effective such finish will be used on Stanley hinges • when ordering this extra rust-resisting base plating, insert the letter "K" as a prefix to the class number and suffix the final finish symbol: ie. K239A, BBK239A

for absolute assurance against rust non-ferrous metals should be used

- each hinge with necessary screws for each leaf in separate packages, is then again wrapped in paper

Stanley hinges are plainly stamped with the trade **STANLEY** mark • the class number is stamped on the back of ball bearing hinges, non-ferrous metal hinges, template hinges and plain joint polished steel hinges

the Stanley Works can supply hinges to meet any condition whether usual or unusual • if you need help — contact our factory or your local hardware consultant

In addition to filling your hinge needs, Stanley also manufactures a complete line of hardware • for the complete Stanley line, write us for our hardware catalog

STANLEY

► how to select the right hinge

1. primary consideration is given to the type of door and jamb for selection of a definite type hinge — see page 5
2. the weight of the door and frequency of use determine whether an extra-heavy ball bearing, standard weight ball bearing or plain bearing hinge should be used • extra heavy ball bearing hinges should always be used on heavy doors and doors where high frequency service is expected
3. the type of metal to use is determined by several considerations, such as atmospheric conditions, location of doors, or special conditions as in chemical laboratories, sewage disposal plants, etc • while ferrous metal can be given a good rust-resisting base, it cannot be given the same absolute guarantee against rust as non-ferrous metals and should not be used for extreme exposure
4. finish on hinges can be furnished to our standard or United States standard finishes as noted on page 20 • when an exact match of another manufacturer's finish is desired, submit sample
5. size of hinge is determined by width and thickness of the door • see right hand side of page
6. special hinges can be made on order • submit details

► estimated frequency of door operation

type of building and door	estimated frequency	
	daily	yearly
large department store entrance	5,000	1,500,000
large office building entrance	4,000	1,200,000
theater entrance	1,000	450,000
schoolhouse entrance	1,250	225,000
schoolhouse toilet door	1,250	225,000
store or bank entrance	500	150,000
office building toilet door	400	118,000
schoolhouse corridor door	80	15,000
office building corridor door	75	22,000
store toilet door	60	18,000
dwelling house entrance	40	15,000
dwelling house toilet door	25	9,000
dwelling house corridor door	10	3,600
dwelling house closet door	6	2,200

*performance

► factors for determining size of hinge

► **length** — means length of barrel or joint (not including tips)

door and transom thickness	width of door or height of transom (inches)	length of hinge (inches) (width depends on trim to clear — see below)
doors		
3/4" to 1 1/4" cabinet (wood).....	to 24	2 1/2
3/4" and 1 1/4" screen and storm (wood)...	to 36	3
1 1/4" (wood).....	to 32	3 1/2
	over 32 to 37	4
1 1/4" (steel or wood)...	to 32	4 1/2
	over 32 to 37	5
	over 37 to 43	5 1/2
	over 43 to 50	6
2", 2 1/4" and 2 1/2" (steel or wood).....	to 43	5
	over 43 to 50	6
transoms		
1 1/4" and 1 1/4" (steel or wood).....	to 20	3
	over 20 to 36	3 1/2
2", 2 1/4" and 2 1/2" (steel or wood).....	to 20	3 1/2
	over 20 to 36	4

if door size calls for standard weight hinges, but is a high frequency door, then use extra heavy hinges in same length and width

doors up to 60" high require 2 hinges; 60" to 90" require 3 hinges; over 90" to 120" require 4 hinges

transoms up to 48" wide require 2 hinges; over 48" to 84" require 3 hinges

hinge size given refers to length of joint, which should always be given first

► width — means full width when open

formula for determining width of hinge

for doors up to 2 1/4" in thickness

twice door thickness + trim projection — 1/2" — hinge width

for doors 2 1/2" to 3" in thickness

twice door thickness + trim projection — 3/4" — hinge width

if fraction in answer is between regular sizes, use nearest larger size

formula for doors up to 2 1/4" figured on hinges set back 1/4" from edge of door and 3/8" set back on doors 2 1/2" to 3" in thickness

see clearance table →

STANLEY

use three hinges to a door

► for selecting type of hinge by door and jamb

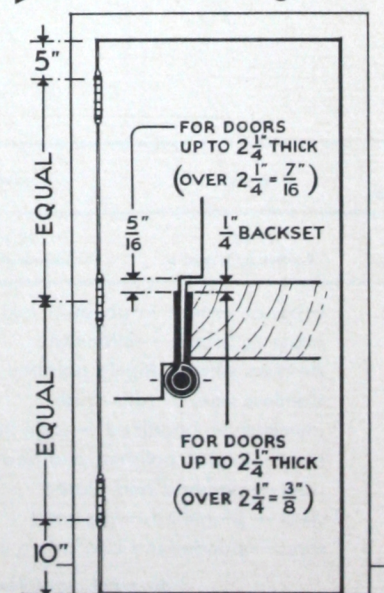
for type of door →	wood doors				kalamein doors				
with type of jamb →	wood		pressed steel		kalamein	channel iron		pressed steel	
frequency and/or weight →	heavy duty	average duty	heavy duty	average duty	average duty	heavy duty	average duty	heavy duty	average duty
use hinge reference (see pages 6 to 9) →	1b	2b	1a	2a	2j	1k	2g	1o	2i
	1d	2d	1c	2c	...	1l	2h	1p	2k
	1f	2f	1e	2e	...	...	...	...	...
	1h	*3b	1g	*3a	...	...	...	...	...
	1j	*3d	1i	*3c	...	...	...	...	...
*low frequency									
...	...	*3e	...	...	...	...	...	...	...

for type of door →	hollow metal doors				tubular steel doors	hollow metal transoms	wood transoms	
with type of jamb →	pressed steel		channel iron		channel iron	pressed steel	pressed steel	wood
frequency and/or weight →	heavy duty	average duty	heavy duty	average duty	heavy duty			
use hinge reference (see pages 6 to 9) →	1a	2a	1q	2l	1m	3f	3f	3g
	1c	2c	1r	2m	1n	3h	3h	3i
	1e	...	...	...	...	...	...	...
	1g	...	...	...	...	...	...	...
	1i	...	...	...	...	...	...	...

► clearance

thickness of door (inches)	size of hinge (inches)	clearance (inches)
1 3/8	3 1/2 x 3 1/2	1 1/4
	4 x 4	1 3/4
1 3/4	4 x 4	1
	4 1/2 x 4 1/2	1 1/2
	5 x 5	2
	6 x 6	3
2	4 1/2 x 4 1/2	1
	5 x 5	1 1/2
	6 x 6	2 1/2
2 1/4	5 x 5	1
	6 x 6	2
2 1/2	5 x 5	3/4
	6 x 6	1 3/4
3	6 x 6	3/4
	8 x 8	2 3/4
	8 x 10	4 3/4

► location of hinges



suggested rules

top hinge 5" from jamb rabbet to top edge of barrel

bottom hinge 10" from bottom edge of barrel to finished floor

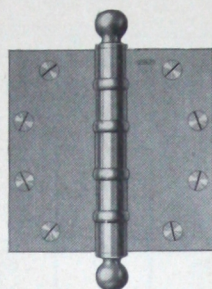
third hinge centered between top and bottom hinges

use three hinges to a door

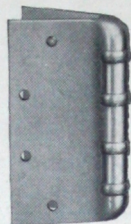
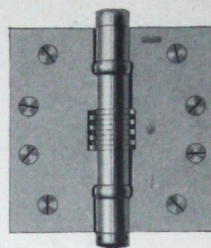
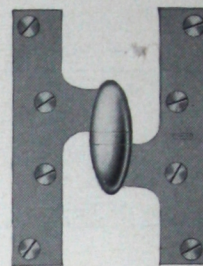
STANLEY

selector guide heavy duty hinges

types



extra-heavy hinges

extra-heavy
hospital hingesextra-heavy
friction hingesextra-heavy olive
knuckle hingesclass
numbers**1a — template**

- ¹ BB199
- ⁶ BB168
- ⁹ BB118
- ³ STSBB199
- ⁴ STSDBB199
- ⁵ ALDBB199

1b — non-template

- ¹ BB181
- ⁶ BB250
- ⁹ BB251
- ³ STSBB181
- ⁴ STSDBB181

1c — template

- ¹ HTBB199
- ⁶ HTBB168
- ⁹ HTBB118

1d — non-template

- ¹ HTBB181
- ⁶ HTBB250
- ⁹ HTBB251

1e — template

- ⁶ BB153
- ⁹ BB147

1f — non-template

- ⁶ BB253
- ⁹ BB247

1g — template

hospital type

(same as above
except barrel top
rounded like 1c)

- ⁶ HTBB153
- ⁹ HTBB147

1h — non-template

hospital type

(same as above
except barrel top
rounded like 1c)

- ⁶ HTBB253
- ⁹ HTBB247

1i — template

- ¹ BB92
- ⁶ BB142
- ⁹ BB143

1j — non-template

- ¹ BB104
- ⁶ BB202
- ⁹ BB204

for sizes and
gauges see page 10 →

table 1

table 1

table 2

table 3

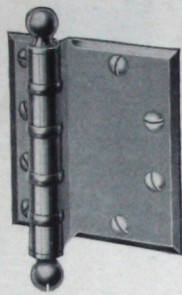
for application
see page →15
figures a, b and c15
figures a, b and c15
figures a, b and c15
figures a, b and cmetals
and
finishes

- ¹ brass or bronze — polished and finely finished
- ² brass or bronze — planished
- ³ stainless steel — highly polished
- ⁴ stainless steel — satin finish
- ⁵ aluminum — anodized — satin finish
- ⁶ steel — highly polished and heavily plated
- ⁷ steel — polished and plated
- ⁸ steel — planished and plated
- ⁹ steel — bonderized and prime coated for painting

for metals and finishes completely described — see pages 2, 3 and 20

STANLEY

use three hinges to a door



**extra-heavy
full surface hinges**

1k — template

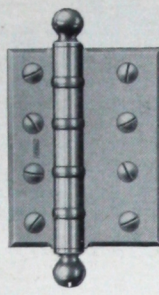
- ¹ BB109
- ⁶ BB169
- ⁹ BB129

1l — template

hospital type

(same as above
except barrel ends
are rounded like 1c)

- ¹ HTBB109
- ⁶ HTBB169
- ⁹ HTBB129



**extra-heavy
full surface hinges**

1m — template

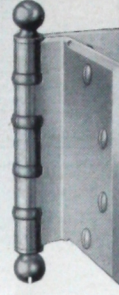
- ¹ BB109½
- ⁶ BB169½
- ⁹ BB129½

1n — template

hospital type

(same as above
except barrel ends
are rounded like 1c)

- ¹ HTBB109½
- ⁶ HTBB169½
- ⁹ HTBB129½



**extra-heavy
half surface hinges**

1o — template

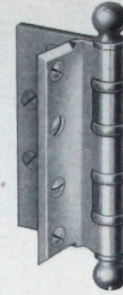
- ¹ BB113
- ⁶ BB163
- ⁹ BB123

1p — template

hospital type

(same as above
except barrel ends
are rounded like 1c)

- ¹ HTBB113
- ⁶ HTBB163
- ⁹ HTBB123



**extra-heavy
half mortise hinges**

1q — template

- ¹ BB98
- ⁶ BB138
- ⁹ BB114

1r — template

hospital type

(same as above
except barrel ends
are rounded like 1c)

- ¹ HTBB98
- ⁶ HTBB138
- ⁹ HTBB114

types

class
numbers

table 4	table 4	table 4	table 4	for sizes and ←gauges see page 10
15 figure f	15 figure g	15 figure e	15 figure h	for application ←see page

- ¹ brass or bronze — polished and finely finished
- ² brass or bronze — planished
- ³ stainless steel — highly polished
- ⁴ stainless steel — satin finish
- ⁵ aluminum — anodized — satin finish
- ⁶ steel — highly polished and heavily plated
- ⁷ steel — polished and plated
- ⁸ steel — planished and plated
- ⁹ steel — bonderized and prime coated for painting

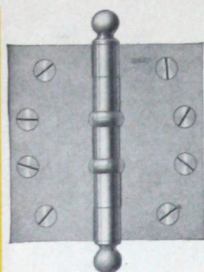
for metals and finishes completely described — see pages 2, 3 and 20

metals
and
finishes

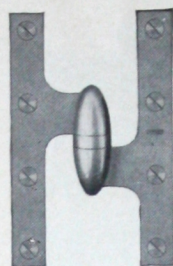
use three hinges to a door



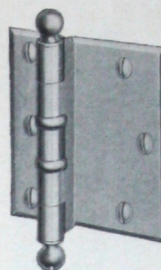
types



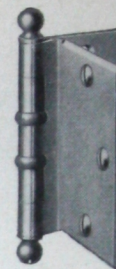
full mortise hinges



olive knuckle hinges



full surface hinges



half surface hinges

class numbers

2a — template

¹ BB193 ³ STSBB193
⁶ BB174 ⁴ STSDBB93
⁷ BB179 1/2 ⁵ ALDBB193
⁸ BB179 ¹ BB191 1/2
⁹ BB146 ² BB191

2b — non-template

¹ BB180 ³ STSBB180
⁶ BB239 ⁴ STSDBB180
⁷ BB241 1/2 ¹ BB184 1/2
⁸ BB241 ² BB184
⁹ BB242

2c — template

hospital type
 (see cutaway above)

¹ HTBB193
⁶ HTBB174
⁹ HTBB145

2d — non-template

hospital type
 (see cutaway above)

¹ HTBB180
⁶ HTBB239
⁹ HTBB235

2e — template

¹ BB95
⁶ BB141
⁹ BB140

2f — non-template

¹ BB100
⁶ BB201
⁹ BB200

2g — template

¹ BB110
⁶ BB170
⁸ BB171
⁹ BB131

2h — template

hospital type
 (see cutaway
 above 2a)

¹ HTBB110
⁶ HTBB170
⁹ HTBB134

2i — template

¹ BB112
⁶ BB172
⁷ BB173 1/2
⁸ BB173
⁹ BB133

2j — non-template

¹ BB116
⁶ BB162
⁷ BB165 1/2
⁸ BB165
⁹ BB125

2k — template

hospital type
 (see cutaway
 above 2a)

¹ HTBB112
⁶ HTBB172
⁹ HTBB132

for sizes and
 gauges see page 10 →

table 5

table 6

table 7

table 8

for application
 see page →

15
 figures a, b and c

15
 figures a and b

15
 figure f

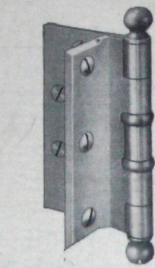
15
 figures d and e

metals
and
finishes¹ brass or bronze — polished and finely finished² brass or bronze — planished³ stainless steel — highly polished⁴ stainless steel — satin finish⁵ aluminum — anodized — satin finish⁶ steel — highly polished and heavily plated⁷ steel — polished and plated⁸ steel — planished and plated⁹ steel — bonderized and prime coated for painting

for metals and finishes completely described — see pages 2, 3 and 20

**selector guide
average duty and
low frequency hinges**

9



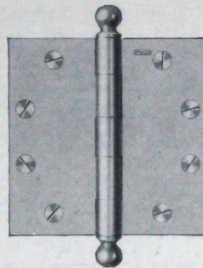
half mortise hinges

2l — template

- ¹ BB108
- ⁶ BB167½
- ⁸ BB167
- ⁹ BB128

2m — template

- hospital type
(see cutaway above)
- ¹ HTBB108
- ⁶ HTBB167½
- ⁹ HTBB128



full mortise hinges
low frequency

3a — template

- ¹ 194 ⁹ 146
- ⁶ 174 ¹ 191½
- ⁷ 179½ ² 191
- ⁸ 179

3b — non-template

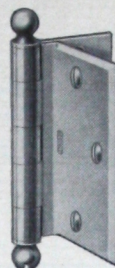
- ¹ 175 ⁹ 242
- ⁶ 239 ¹ 184½
- ⁷ 241½ ² 184
- ⁸ 241

3c — template

- hospital type
(see cutaway
above 2l)
- ⁶ HT174
- ⁹ HT145

3d — non-template

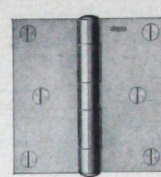
- hospital type
(see cutaway
above 2l)
- ⁶ HT239
- ⁹ HT235



half surface hinges
low frequency

3e — non-template

- ⁸ 165
- ⁹ 125



transom hinges



drive fast
pin shown

full mortise hinges

3f — template

- ¹ 196½
- ⁸ 178
- ⁹ 148

3g — non-template

- ¹ 192½
- ⁸ 291
- ⁹ 290

3h — template

- drive fast pin
(see cutaway above)
- ¹ DFP196½
- ⁸ DFP178
- ⁹ DFP148

3i — non-template

- ¹ DFP192½
- ⁸ DFP291
- ⁹ DFP290

types

**class
numbers**

table 7	table 9	table 10	table 11	for sizes and ← gauges see page 10
15 figure h	15 figures a and b		15 figures i and j	for application ← see page

- ¹ brass or bronze — polished and finely finished
- ² brass or bronze — planished
- ³ stainless steel — highly polished
- ⁴ stainless steel — satin finish
- ⁵ aluminum — anodized — satin finish
- ⁶ steel — highly polished and heavily plated
- ⁷ steel — polished and plated
- ⁸ steel — planished and plated
- ⁹ steel — bonderized and prime coated for painting

for metals and finishes completely described — see pages 2, 3 and 20

**metals
and
finishes**

use three hinges to a door

STANLEY

table of sizes and gauges

Table Number

↓
1

size	...	...	...	...	*4" x 4"	4½" x 4"	5" x 4"	5" x 4½"	*6" x 6"	*8" x 6"
gauge	...	...	...	...	.170	.180	.190	.203	.203	.203

*not regularly furnished in these sizes in stainless steel or aluminum metal

2

size	...	...	...	...	...	4½" x 4"	5" x 4"	5" x 4½"	...	...
gauge	...	...	...	...	...	.190	.190	...	...	...

3

size	...	...	...	...	6" x 4"	6" x 4½"	6" x 5"	6" x 6"	...	...
gauge	...	...	...	...	.225	.225	.225	.225	...	...

4

size	...	...	...	...	...	4½"	5"	6"	...	...
gauge	...	...	...	...	...	.180	.190	.203	...	...

5

size	...	...	*3" x 3"	*3½" x 3½"	4" x 3½"	4½" x 4"	5" x 4"	5" x 4½"	**6" x 6"	...
gauge	...	...	.092	.123	.130	.134	.146	.160	...	...

*not regularly furnished in these sizes in stainless steel or aluminum metal

**not regularly furnished in this size in stainless steel or aluminum or hospital type hinges

6

size	...	...	...	...	...	...	5"	6"	...	...
gauge	...	...	...	...	...	...	.169	.203	...	...

7

size	...	...	...	...	...	4½"	5"	...	...	...
gauge	...	...	...	...	...	.134	.146	...	...	...

8

size	...	...	3"	3½"	4"	4½"	5"	...	...	...
gauge	...	...	.092	.123	.130	.134	.146	...	...	...

9

size	*2" x 2"	*2½" x 2½"	3" x 3"	3½" x 3½"	4" x 4"	4½" x 4½"	5" x 5"	**6" x 6"	...	...
gauge	.082	.089	.092	.123	.130	.134	.146	.160	...	...

*not furnished in these sizes in hospital type

**not furnished in hospital type or 191½, 184½, 191 or 184

numbers 194 and 175 are stainless steel bushed • 191½, 184½, 191 and 184 regularly furnished with flat button tips

10

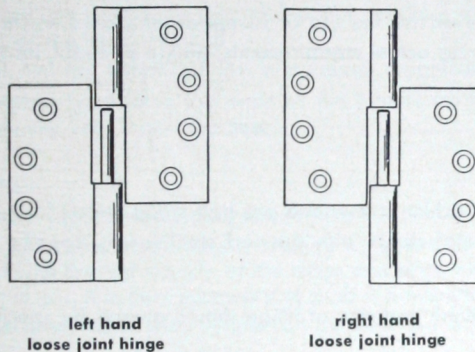
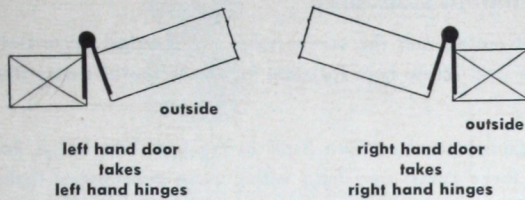
size	1½"	2"	2½"	3"	3½"	4"	4½"	...	...	...
gauge	.050	.065	.075	.092	.123	.130	.134	...	...	...

11

size	2" x 2"	2½" x 2½"	3" x 3"	3½" x 3½"	4" x 4"	...	...	...	...	...
gauge	.082	.089	.092	.123	.130	...	...	...	...	...

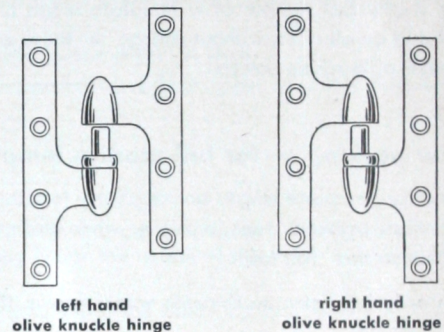
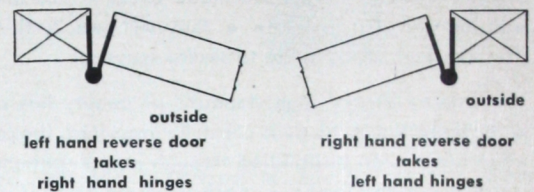
all steel prime coated hinges and stainless steel or aluminum hinges are regularly furnished with flat button tips — other numbers on order.

doors opening in



doors opening out

including closet, cupboard and bookcase doors



the hand of a butt hinge is determined from the outside of the door to which it is applied • the outside of a cupboard, bookcase or closet door is the room side • for other doors, the outside is usually the "push" or jamb side if standing outside of a door which opens from you, to the right, it takes right hand butt hinges • if to the left, it takes left hand butt hinges

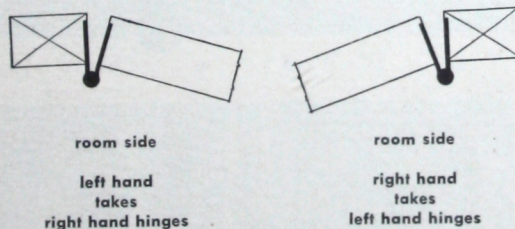
if standing outside of a door which opens toward you, to the right, it takes left hand butt hinges • if to the left, it takes right hand butt hinges

reversed doors are doors opening out

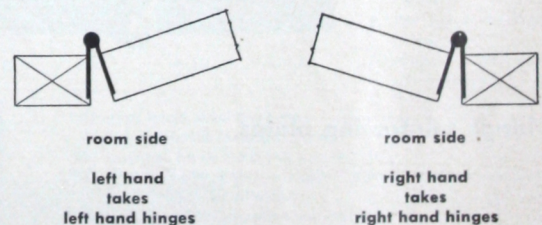
it will be observed that this method of determining the hand of loose joint cabinet hinges is exactly the opposite from the furniture manufacturers' standard rule

casement windows

opening in



opening out



the hand of casement windows is taken from the room side

opening in • if the window opens to the left, it takes right hand butt hinges; if to the right, it takes left hand butt hinges

opening out • if the window opens to the left, it takes left hand butt hinges; if to the right it takes right hand butt hinges

in ordering butt hinges that are not reversible, the hand must always be specified

Stanley template hinges — conform to U. S. Government standards

Stanley template hinges are made exact in size and gauge of metal, and the screw holes are located accurately with the aid of a template • they will exactly fit the sinkage and screw hole location in hollow metal doors and pressed steel jambs made to similar template

The Stanley Works' high standard of quality has a special opportunity to prove itself in the template hinge line • each individual hinge is carefully inspected, (boxed gauged three times) and held within close commercial limits, which have been established through long experience and close attention to the requirements of manufacturers of metal doors and jambs • each template hinge is stamped with the class number on the back

when a physical sample of a template hinge is not required, we advise the use of blueprint templates which are available on all sizes, without charge • these are drawings showing actual measurements, gauge of metal, location and size of machine screws

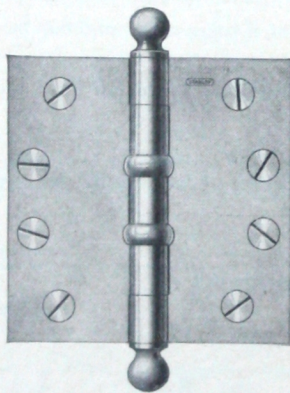
screw packing — for full mortise template hinges

full mortise template hinges are regularly furnished with one-half machine screws and one-half wood screws for wood doors with pressed steel jambs • when ordered for hollow metal doors with pressed steel jambs, specify "all machine screws" (all MS)

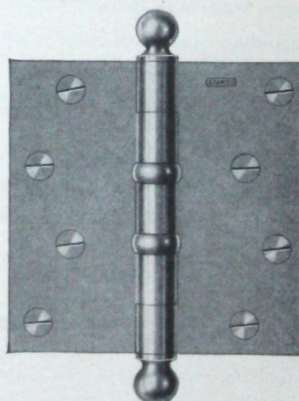
when ordering extra machine or wood screws, the class number, finish and size of hinge should always be specified

screw hole locations

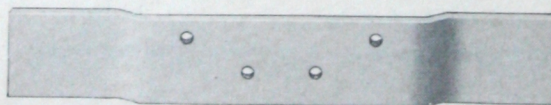
size $4\frac{1}{2}" \times 4\frac{1}{2}"$
template hinge



size $4\frac{1}{2}" \times 4\frac{1}{2}"$
non-template hinge



hinge reinforcing plates



available on order and made to the specifications of the manufacturers of hollow metal doors and pressed steel jambs and meet the requirements of the Underwriters Laboratories

the screw holes are drilled and tapped in accordance with U. S. Template Standards
information on request

tips



ball tip



flat button tip



hospital type

ball tips are standard for most hinges

flat button tips are regularly furnished with hinges where indicated in catalog • can be had on order for other hinges • when desired specify FBT • to facilitate the easy removal of the pin (on sizes 3" x 3" and larger) the bottom tip is provided with a hole (pat. pending) for insertion of a nail or wire, thus preventing the mar-ring of the hinge or finish

ball and flat button tip pins in standard weight steel hinges are made in one piece of steel

hospital type have the ends of the barrel rounded, making it impossible to attach rope, wearing apparel, etc • easily kept free from dust

pins

easily seated non-rising loose pins

the non-rising pin feature is secured by means of a split ring attached in a groove in the pin which comes into con-tact with the top knuckle of the hinge and prevents the pin from rising under the action of the door • in the seating of the pin, it is only necessary to push it down into position

non-removable pins-hinges can be obtained with non-removable pins under the following symbols:

FSP-spun pin, without tips

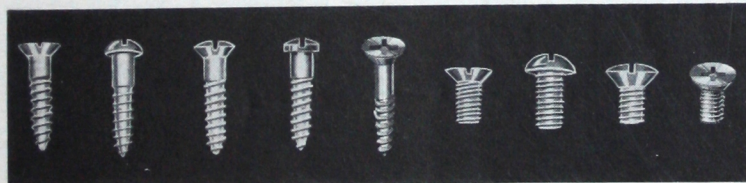
FTP-floating pin, tips driven in both ends

*NRP-loose pin, set screw in barrel • non-removable when door is closed

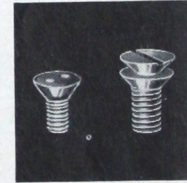
*conforms to U. S. Government specifications for exterior doors opening out

screws and bolts

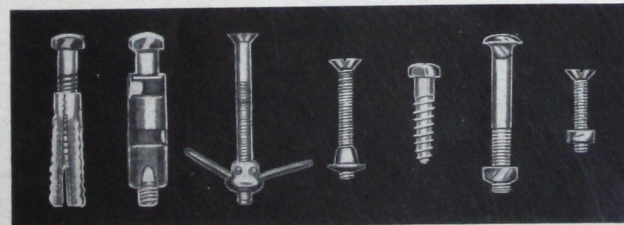
showing various types of regular and special screws and bolts furnished only with Stanley products • **orders for screws or bolts only are not solicited**



1 2 3 4 *5 6 7 8 *9



+10 +11



*12 *13 *14 15 16 17 *18

*not carried in stock

+not carried in stock and made only on special order • also obtainable in wood screws

for institutions

1. flat head wood screw
2. round head wood screw
3. oval head wood screw
4. pyramid head wood screw
5. Phillips head wood screw
6. flat head machine screw
7. round head machine screw

8. oval head machine screw
9. Phillips head machine screw
10. spanner head machine screw
11. slotted twin head machine screw, slotted head is cut off after installation
12. lag screw with expansion shield
13. machine bolt with expansion shield
14. flat or round head spring-wing toggle bolt
15. oval head machine screw with grommet nut
16. lag screw
17. carriage bolt
18. flat or round head stove bolt

use three hinges to a door

STANLEY

butt hinge requirements for Underwriters' Laboratories, Inc. • labeled swinging hollow metal and metal clad paneled (kalamein) fire doors as included in list of inspected fire protection appliances

classification and location of openings

class "A" situations	in fire walls
class "B" situations	in vertical shafts
class "C" situations	in corridor and room partitions
class "D" situations	in exterior walls (severe fire exposure)
class "E" situations	in exterior walls (moderate fire exposure)
class "D" situations	to exterior fire escapes (severe fire exposure)
class "E" situations	to exterior fire escapes (moderate fire exposure)

class A situations: hollow metal fire doors

full mortise template butt hinges, class nos. BB118, HTBB118, BB168, HTBB168
 half mortise template butt hinges, class nos. BB138, HTBB138, BB114, HTBB114
 full surface template butt hinges, class nos. BB169, HTBB169, BB129, HTBB129
 half surface template butt hinges, class nos. BB123, HTBB123, BB163, HTBB163

only full mortise, half mortise, full surface or half surface template butt hinges bearing the above class numbers are approved which are made of steel, not less than $4\frac{1}{2}$ " in height and 0.180" in thickness • to be furnished with a rust-resisting base when installed on exterior doors or in situations subject to corrosive atmosphere

class B, C, D or E situations: hollow metal or kalamein fire doors

not over 8' in height

full mortise template butt hinges, class nos. BB118, HTBB118, HT145, HTBB145, 146, BB146, BB147, HTBB147, 148, BB153, HTBB153, BB168, HTBB168, 174, BB174, HTBB174, 178, 179, 179½, BB179, BB179½, BB199, HTBB199

half mortise template butt hinges, class nos. BB114, HTBB114, BB128, HTBB128, BB138, HTBB138, BB167, BB167½, HTBB167½

full surface template hinges, class nos. BB129, HTBB129, BB131, HTBB134, BB169, HTBB169, BB170, HTBB170, BB171

half surface template butt hinges, class nos. BB123, HTBB123, HTBB132, BB133, BB163, HTBB163, BB172, HTBB172, BB173, BB173½

only full mortise, half mortise, full surface or half surface template butt hinges bearing the above class numbers are approved, which are made of steel not less than $4\frac{1}{2}$ " in height and 0.134" in thickness • only full mortise bronze butt hinges not less than $4\frac{1}{2}$ " in height and not less than 0.180" in thickness are approved

bronze full mortise butt hinges can be used only when the jamb of the frame is provided with a steel stud and a socket in the rear edge of the door • one socket and one stud to be provided for each butt hinge

when olive knuckle template butt hinges are used they shall be made of steel not less than 6" in height and 0.225" in thickness, class nos. BB142, BB143

doors over 8' in height

to have types of butt hinges described above except to be not less than $4\frac{1}{2}$ " in height and 0.180" in thickness

access doors and transoms

not exceeding 3' in height and 2' in width

only full mortise, half mortise, full surface and half surface template butt hinges bearing the above class numbers are approved, which are made of steel not less than 3" in height and 0.092" in thickness

not exceeding 5' in height and 3' in width

butt hinges to be as described above except they shall be not less than 4" in height and 0.130" in thickness

hinge spacing

doors to and including 60" high require 2 butt hinges • over 60" to and including 90" require 3 butt hinges • over 90" to and including 120" require 4 butt hinges

transoms to and including 48" wide require 2 butt hinges • over 48" to and including 84" require 3 butt hinges



use three hinges to a door

wood door with wood jamb

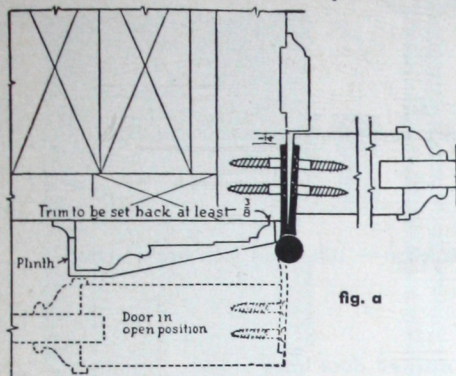


fig. a

full mortise non-template butt hinge

wood door with pressed steel jamb

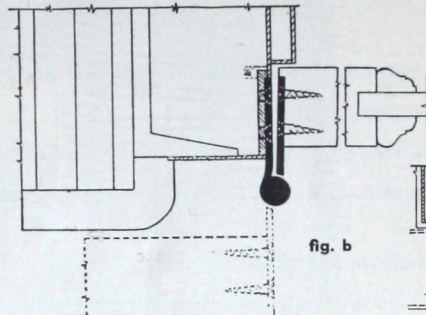


fig. b

full mortise template butt hinge

hollow metal door with pressed steel jamb

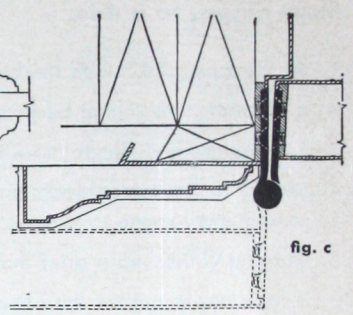


fig. c

full mortise template butt hinge

kalamein door with kalamein jamb

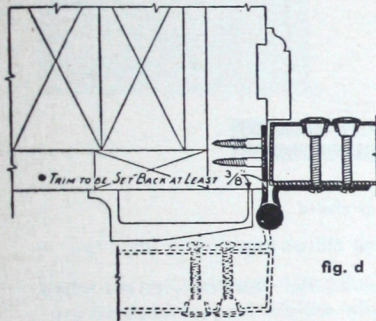


fig. d

half surface non-template butt hinge

kalamein door with pressed steel jamb

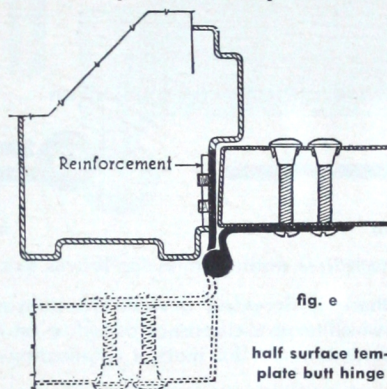


fig. e

half surface template butt hinge

kalamein door with channel iron jamb

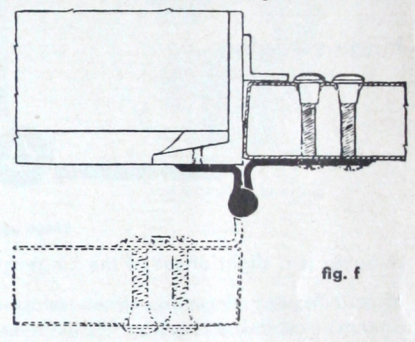


fig. f

full surface template hinge

half surface and full surface hinges

in bolting the hinge to the kalamein door the grommet nuts draw the metal tightly into the wood core preventing buckling of the metal • they are easily applied and give a neat, finished appearance

the loose pin types are reversible for right or left hand doors by unscrewing the slotted tip, reversing the pin and applying tip to the opposite end

door leaf and jamb leaf are measured from center of pin to outer edge of leaf

• offset is measured from back of door leaf to center of pin



section showing application of machine screw and grommet nut to a kalamein door

tubular steel door with channel iron jamb

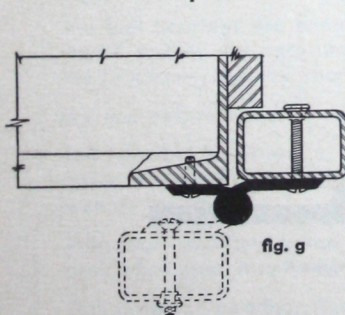


fig. g

full surface template hinge

hollow metal door with channel iron jamb

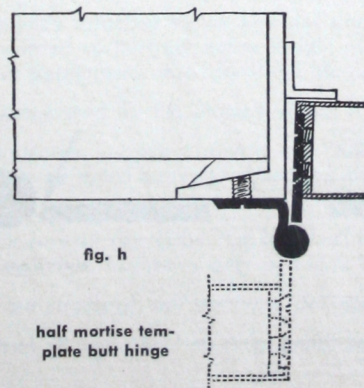


fig. h

half mortise template butt hinge

hollow metal transom with pressed steel frame

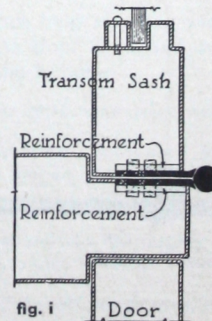


fig. i

full mortise template transom butt hinge

wood transom with wood frame

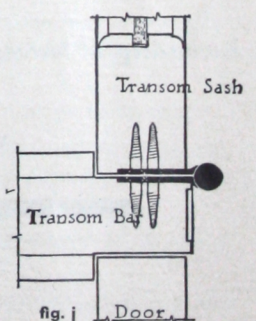


fig. j

full mortise non-template transom butt hinge

use three hinges to a door

STANLEY

three hinges to a door

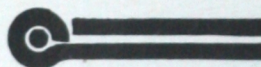
1. the third hinge will hold the butt edge of the door in alignment and help prevent the door from warping
2. a warped door cannot be properly latched or locked
3. light weight doors have more tendency to warp than heavy doors
4. interior doors, screen doors and combination doors are all of light construction — stiles and rails are narrow — consequently prone to warp
5. warping causes more grief than wear and more quickly
6. it costs less to put the third hinge on every door than to repair a single warped door later
7. "three hinges to a door" means satisfaction first, last and all time

hinge swaging

swaged — for mortise application



hinge opened



hinge closed

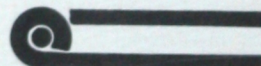
swaging is a slight offset of the hinge at the barrel which permits the leaves to come closer together

after a Stanley hinge has been swaged there is provided a standard clearance of $\frac{1}{16}$ " between leaves when opened parallel, except on friction hinges which have a clearance of $\frac{3}{32}$ " • on triple weight hinges there is provided a standard clearance of $\frac{1}{8}$ " when assembled for full mortise application

not swaged — for surface application



hinge opened



hinge closed

when not swaged, hinges are slightly less in width

beveling of leaves

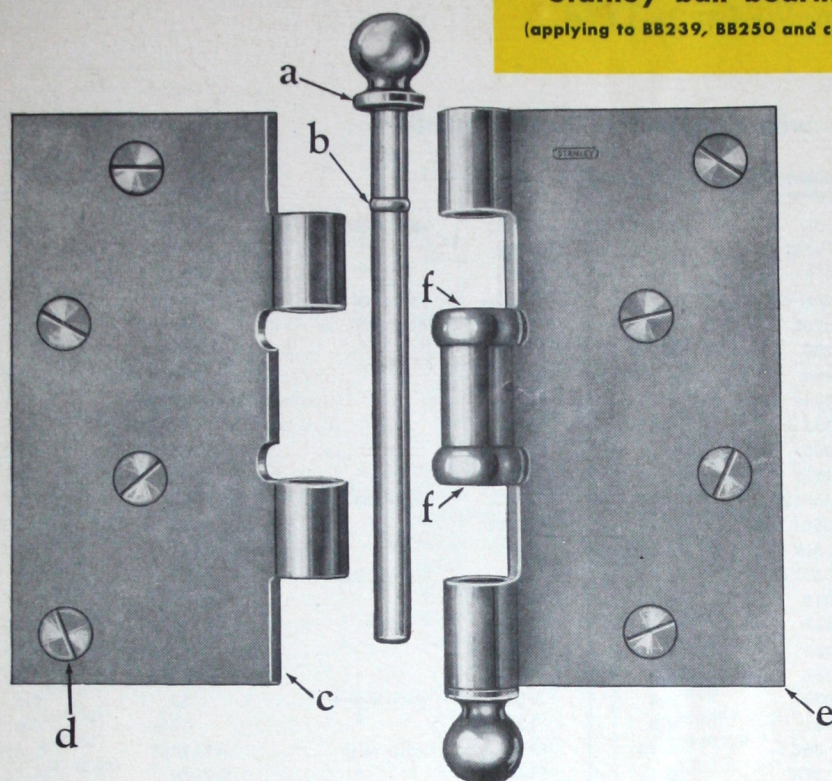


leaves beveled



leaves not beveled

the beveled inner edges of the leaves make close-fitting joints and add greatly to the appearance of the hinge



ball bearing

full jeweled bearing

- a. **squared shoulders** on the tip and pin fit flush with the barrel of the hinge
- b. **easily seated non-rising loose pin** is secured by means of a split ring attached in a groove in the pin which comes into contact with the top knuckle of the hinge and prevents the pin from rising under the action of the door • in the seating of the pin, it is only necessary to push it down into position
- c. **beveled edges** • the inner edges of the leaves are beveled to make close-fitting joints
- d. **screw holes** are located so as to afford secure anchorage of the leaves • holes are countersunk to accurately fit the heads of the screws which are selected for each size hinge to bear a definite relationship to the weight of the door to be carried
- e. **square corners** • the outer edges of the leaves are ground true and the corners are square
- f. **ball bearings** • this is a highly developed type of bearing and is applied to the joints of standard ball bearing hinges • it consists of hardened steel raceways, accurately made, containing hardened and ground steel balls of the highest grade

the raceways and steel balls are entirely enclosed and protected by a solid metal casing, excluding dust and moisture, and being permanently lubricated need no further oiling

the ball bearings are permanently attached to the knuckles and are held in place when the leaves are taken apart • they are accurately fitted so that the entire weight of the door is carried on the ball bearings from the beginning, thereby insuring permanency throughout the life of the building

the non-detachable feature, originated by the Stanley works, is an important advance in hinge construction

full jeweled bearings • illustration in circle above is our "full jeweled" combined radial and thrust bearing which is an improved feature in all extra heavy four bearing butt hinges • this bearing eliminates lateral as well as vertical wear

laboratory and field tested for several years, the "full jeweled" bearing has thoroughly demonstrated its superiority when used in extra heavy hinges for heavy duty and high frequency service

"full jeweled" bearings, like our standard ball bearings, are non-detachable, permanently lubricated and fully protected from the elements

**U. S. Govt. type numbers
listed in federal specifications
FF-H-106a and FF-H-111a**

with comparative Stanley numbers

U. S. number		Stanley number	catalog section — page	U. S. number		Stanley number	catalog section — page
193	roller latch.....	53	F-7	1232	sash pulley.....	7002A	L-2
494	screen door guard.....	1737 1/4	J-4	F1232	" "	7001A	L-2
1011	barrel bolt.....	1077	H-10	F1233	" "	7000	L-4
F1011	" "	Sc1078	H-10	1265A	sash pole.....	7025 1/4	L-7
F1011C	" "	Sc1078K	H-10	1269	door pull.....	477	J-6
1012	" "	1109	H-11	F1269	" "	479	J-6
F1012	" "	Sc1084	H-11	1275	" "	482 1/4 no. 3	I-11
F1012C	" "	Sc1084K	H-11	F1275	" "	482J no. 3	I-11
1023A	chain bolt.....	355 1/4	H-16	F1275C	" "	482K no. 3	I-11
F1023A	" "	1055J	H-16	F1276	" "	1265J	I-12
F1023AC	" "	1055K	H-16	F1276C	" "	1265K	I-12
1023B	foot bolt.....	356 1/4	H-17	1280	knob pull.....	4482	D-12
F1023B	" "	1056J	H-17	1280D	" "	4492CM	D-12
F1023BC	" "	1056K	H-17	1282	" "	4471	D-12
F1029	cremone bolt.....	1052KJ	H-21	1306	drawer pull.....	4477	D-9
F1051	cane bolt.....	1010	H-18	1306D	" "	4420CM	D-8
1061	surface bolt.....	367	H-4	F1307	" "	4429CM	D-10
F1061	" "	381	H-4	F1308	" "	4466CM	D-10
1062	" "	366	H-4	F1310	" "	470CM	I-10
F1062	" "	379	H-4	1337A	door silencer.....	52	F-6
F1068	shelf bracket.....	Sc796J	K-3	1337B	" "	52 1/2	F-6
1071	friction catch.....	30C	D-14	F1401	hinge hasp.....	Sc912RBP	G-15
F1072	" "	37K	D-13	F1401C	" "	Sc912K	G-15
1074	" "	33 1/4 C	D-13	F1401E	" "	Sc912PS	G-15
F1074C	" "	33K	D-13	F1403	" "	941RBP 7 1/2"	G-16
F1074D	" "	33N	D-13	F1403C	" "	941K 7 1/2"	G-16
F1075A	elbow catch.....	36N	D-14	F1403E	" "	Sc941PS 7 1/2"	G-16
F1075AC	" "	36K	D-14	F1405	" "	Sc911RBP	G-12
1076A	cabinet latch.....	4220CM	D-6	F1405C	" "	Sc911K	G-12
1078A	" "	1299 3/4 CM	D-7	F1405E	" "	Sc911PS	G-12
F1078A	" "	1299 1/4 CM	D-7	F1430	padlock eyes.....	1245R no. 2	I-8
F1137	cellar window fasteners	1763J	J-2	F1430C	" "	1245K no. 2	I-8
F1137C	" "	1763K	J-2	F1430D	" "	1245J no. 2	I-8
F1147	scuttle hinge.....	1634R	F-5	F1650	storm sash adjuster...	1719K	J-18
F1147C	" "	1634K	F-5	F1653	" "	sets 1727K	J-19
F1148	scuttle fastener.....	1674R	F-5	F1655	" "	1723 1/2 K	J-18
F1148C	" "	1674K	F-5	F1801	blind hinge.....	Sc1360	M-5
1149A	door holder.....	459	H-3	F1801C	" "	Sc1640K	M-5
1156	" "	457	H-3	F1804	" "	Sc1342	M-5
F1156	" "	456	H-3	F1804C	" "	Sc1642K	M-5
F1170	" "	1774J	O-10	F1805	" "	Sc1364	M-5
1171	closet bar.....	7021N	K-15	F1805C	" "	Sc1644K	M-5
F1171	" "	7020N	K-15	F1806	" "	Sc1346	M-5
F1188	thumb latch.....	1260J nos. 3, 4	I-3	F1806C	" "	Sc1646K	M-5
F1189	" "	1252J	I-6	F1811	blind fastener.....	Sc1382	M-10
F1190	" "	1264J	I-6	F1811C	" "	Sc1682K	M-10
F1190C	" "	1264K	I-6	F1812	" "	Sc1382 1/2	M-10
F1195	" "	1289KJ no. 2	I-5	F1812C	" "	Sc1682 1/2 K	M-10
F1195C	" "	1289K no. 2	I-5	F1821	blind holdback.....	1685 1/2 P	M-2
F1195H	" "	1289R no. 2	I-5	F1821A	" "	1685P	M-2
1223	screen lift.....	465 1/4	J-6	F1824	screen hanger.....	1742K	J-13
F1223	" "	Sc51J	J-6	F1825	" "	1724K	J-13
F1223C	" "	Sc51K	J-6	F1825B	" "	1704K	J-12
				F1826	" "	1725K	J-14
				F1830	" "	1716K	J-15
				F1831	" "	1717K	J-15

with comparative Stanley numbers

U. S. number		Stanley number	catalog section — page	U. S. number		Stanley number	catalog section — page
2001	butt hinge.....	BB180	A-3	2031	butt hinge.....	Sc804	C-5
2001½	" "	BB180FBT	A-3	2031A	" "	804KBP	C-5
2002	" "	BB181	A-2	2040	" "	243	B-8
2002½	" "	BB181FBT	A-2	2041	" "	BB243	B-8
2005	" "	175	B-3	2060	" "	HTBB180	A-19
2005½	" "	175FBT	B-3	2061	" "	HTBB239	A-19
2010	" "	BB241	A-6	2061P	" "	HTBB235	A-19
2010½	" "	BB241FBT	A-6	2063	" "	HTBB181	A-18
2010B	" "	BB239	A-3	2064	" "	HTBB250	A-18
2010½B	" "	BB239FBT	A-3	2064P	" "	HTBB251	A-18
2010½P	" "	BB242	A-6	2065	" "	**HTBB112	A-23
2011	" "	BB250	A-2	2066	" "	**HTBB172	A-23
2011½	" "	BB250FBT	A-2	2066P	" "	**HTBB132	A-23
2011½P	" "	BB251	A-2	2068	" "	HTBB113	A-22
2014	" "	1345	B-9	2069	" "	HTBB163	A-22
2014½P	" "	242	B-7	2069P	" "	HTBB123	A-22
2015	" "	241	B-7	2080	" "	BB165	A-11
2015½	" "	241FBT	B-7	2080B	" "	BB162	A-11
2015B	" "	239	B-3	2080½P	" "	BB125	A-11
2015½B	" "	239FBT	B-3	A2080	" "	BB163	A-10
2017A	" "	189	D-18	A2080½P	" "	BB123	A-10
2017½A	" "	189FBT	D-18	B2080	" "	165	B-13
2018	" "	289	D-18	B2080½P	" "	125	B-13
2018A	" "	289½	D-18	2081	" "	BB116	A-11
2018½	" "	289FBT	D-18	A2081	" "	BB113	A-10
2018½P	" "	285	D-18	2138	garage hinge.....	BB1458K	O-3
2021	" "	195	D-18	2138A	" "	BB1458KJ	O-3
2021A	" "	195	D-18	2140	" "	BB1456K	O-2
2021B	" "	195	D-18	2140A	" "	BB1456KJ	O-2
2022	" "	295	D-18	2203	strap hinge.....	Sc902RBP	G-3
2022½P	" "	282	D-18	2208	tee hinge.....	Sc906RBP	G-7
2028	" "	192½	B-15	2209	" "	Sc908RBP	G-8
2029A	" "	291K	B-15	2240	scuttle hinge.....	1634	F-5
2029AA	" "	291KBP	B-15	2240A	" "	1634J	F-5
2029B	" "	291	B-15	2240B	" "	1634R	F-5
2029P	" "	290P	B-15	2301	screen door spring hinge...	154	J-8
A2030	hinge.....	850	C-2	2301A	" " " " " " " "	154¼	J-8
A2030A	"*850 loose OH pin		C-2	2302	" " " " " " " "	152	J-8
A2030B	butt hinge *850 swaged, with screw holes		C-2	2302A	" " " " " " " "	152¼	J-8
A2030C	" " *850 swaged, loose OH pin, with screw holes		C-2	2334	floor spring hinge.....	BB156	F-2
A2030D	hinge.....	*850RBP	C-2				
B2030D	"*291 KBP not swaged, without screw holes		B-15				

*when ordering specify as listed

**specify wood screws for jamb leaf unless ordered to template

use three hinges to a door

STANLEY

the following list represents a fair comparison of the United States Standard and different manufacturers' finishes •
when an exact match is desired submit sample

The Stanley Works	United States Standard	general description	Barrows Lock Works	P. & F. Corbin	Lockwood Hardware Mfg. Co.	Norwalk Lock Co.	Penn Hardware Company	Russell & Erwin Mfg. Company	Sager Lock Works	Sargent & Company	Schlage Lock Co.	The Yale & Towne Mfg. Company
A	US9	bright bronze.....	A20	B	1	B	BBZ	11	A20	P	9	BZ10
ANL	...	bright bronze, no lacquer on bronze metal only.....	A20NL	BNL	1NL	BNL	BBZNL	11NL	A20NL	NLP	9A	BZ110
AL	...	aluminum metal, bright.....	A120	...	83	...	...	...	A120	...	...	...
ALD	...	aluminum metal, satin (dull), anodized....	D120	...	84	...	...	64	D120	AN	AL	...
A4	US11	dull bronze, oxidized and relieved for ornamental goods; for plain surfaces specify A5.....	D21	HB	23	DBR	DBZR	11C	D21	O6P	11	BY21
A5	US10	dull bronze, for plain surfaces; for ornamental goods specify A4.....	D20	DB	34	DB	DBZ	11D	D20	OP	10	BY22
A8	...	dull bronze, oxidized.....	...	...	...	DBO	...	13	...	**O3P	...	...
A9	...	dull bronze, oxidized and oil rubbed on bronze metal only.....	D21OR	EB	390R	...	...	...	D21OR	O3P	10B	BY23
B	...	statuary bronze.....	D29	...	38	SB	...	2	D29	...	20	...
C	US3	bright brass.....	A30	A	13½	PK	BB	10	A30	B	3	AZ10
CNL	...	bright brass, no lacquer, on brass metal only.....	A30NL	ANL	13½NL	...	BBNL	10NL	A30NL	NLB	3A	AZ110
CM	US26	chromium plated, bright.....	A110	CR	96	CP	BCH	24	A110	CM	26	DZ10
CMD	US26D	chromium plated, dull.....	D110	DCR	97	DCP	DCH	34	D110	DCM	26D	DY10
F	US4	dull brass.....	D30	EA	13	K	DB	9	D30	OB	4	AY22
F4	US5	dull brass, oxidized and relieved...	D31	KA	43	KR	DBR	9C	D31	OE	5	AY21
G	US18	genuine Bower-Barff.....	...	F	...	RI	...	...	...	...	...	...
*G2	US18A	rust resisting black.....	19	...	...	RIP	...	...	19	...	...	...
*H	US19	dull black, imitation Bower-Barff.....	18	KF	6	HW	IRP	...	18	...	...	...
J	US1B	bright japanned.....	O10	J	J	J	J	...	O10	BJ	...	J
*J1	US1D	dead black.....	OD10	D	JF	DJ	DJ	...	OD10	...	19	...
K	US2C	zinc plated.....	...	...	...	...	...	...	...	...	...	...
KD	...	zinc plated, dull.....	...	...	...	...	...	...	...	...	...	...
KL	...	zinc plated, buffed bright.....	...	...	...	...	...	...	...	...	...	...
N	US14	nickel plated, bright.....	A50	E	5	NP	BN	4	A50	N	14	NZ10
N5	US15	nickel plated, dull.....	D50	DE	90	DN	DN	14	D50	LN	15	NY10
NM	US25	white bronze metal, bright.....	...	NK	...	NM	BWM	...	...	...	25	...
NMD	...	white bronze metal, dull.....	...	DNK	...	DNM	DWM	...	...	...	25D	...
*P	USP	primed for painting.....	OP4	PC	P	PC	PC	PC	...	PC	...	...
R	US2H	hot dipped galvanized.....	...	...	...	DCA	...	...	...	...	...	...
STS	...	stainless steel metal, bright.....	...	...	...	...	...	...	...	...	...	...
STSD	...	stainless steel metal, satin (dull).....	...	...	...	...	...	...	...	...	...	...
Y2	...	nickel plated, imitation half-polished iron, oxidized and relieved.....	...	...	92	HP	SN6	16½	HD91	HF	17A	...

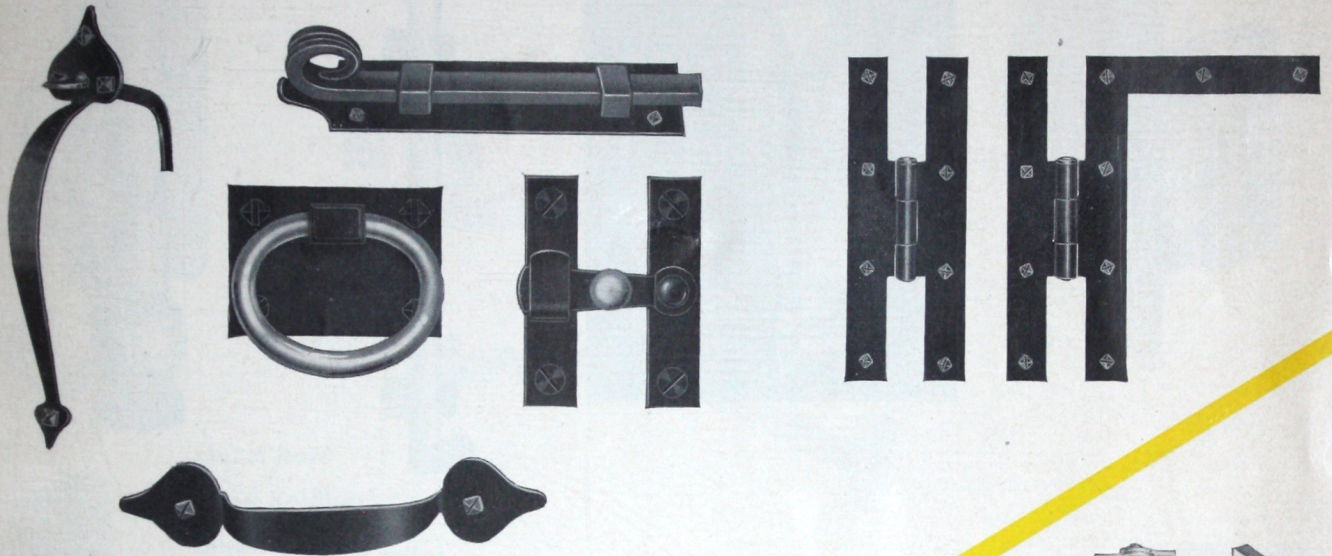
*over a bonderized base

**except lacquered

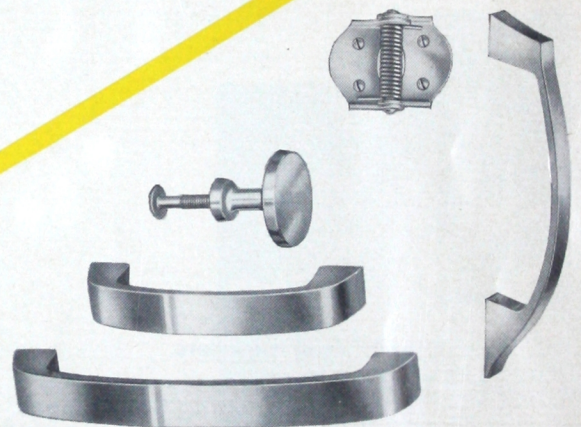
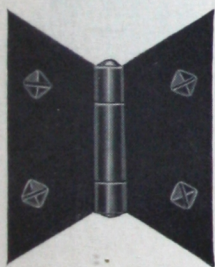
wrought and old iron finishes

- WDB rough rolled surface; dead black over a rust-resisting base
 WR rough rolled surface; black oxidized and relieved over a rust-resisting base
 WYE rough rolled surface; etched, relieved iron over a rust-resisting base
 Y2 plain surface; nickel plated, imitation half-polished iron, oxidized and relieved

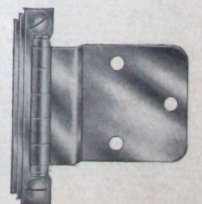
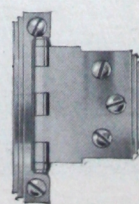
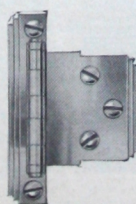
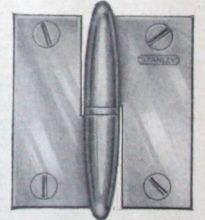
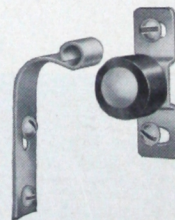
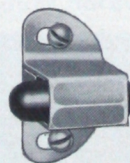
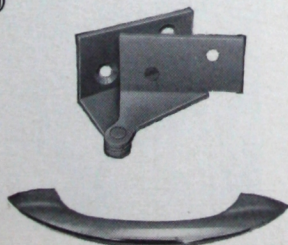
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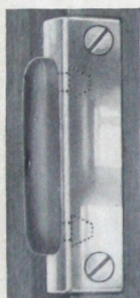
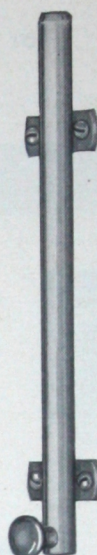
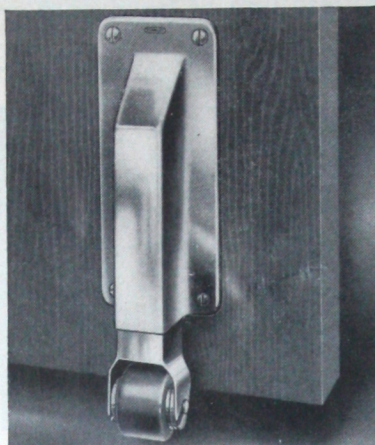
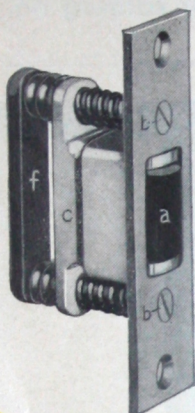


black ornamental hardware



cabinet hardware

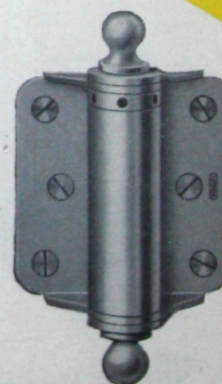
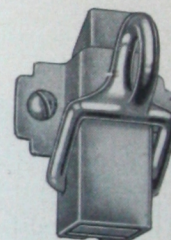


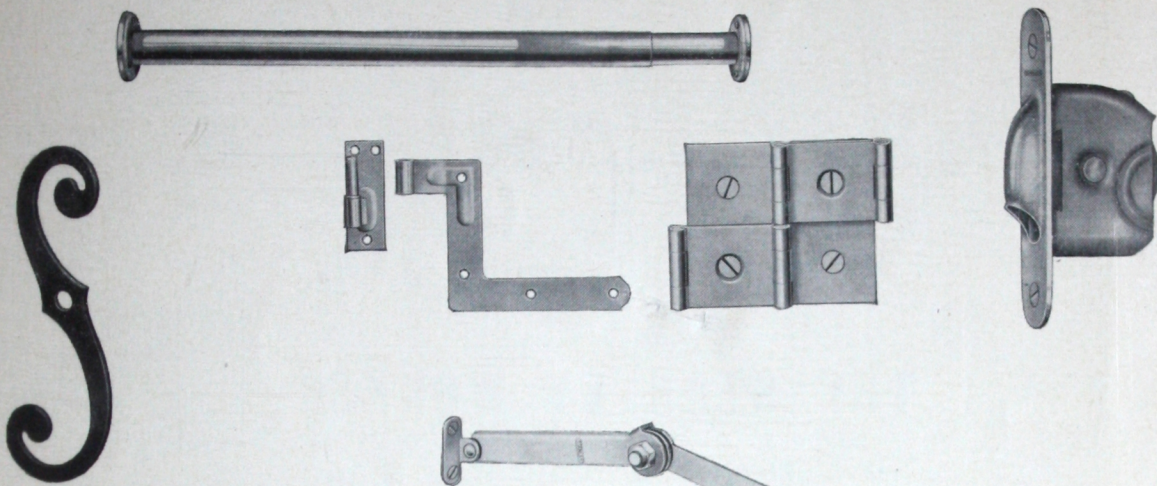


- door silencers
- double acting floor hinges
- screen door spring hinges

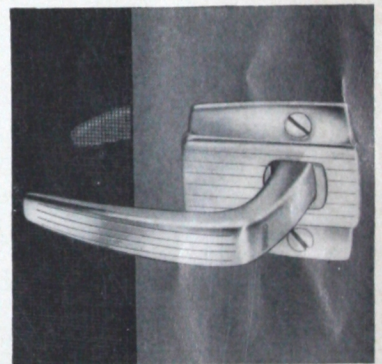


- roller latches ●
- roller door holders ●
- surface bolts ●
- door holders ●
- transom catches ●

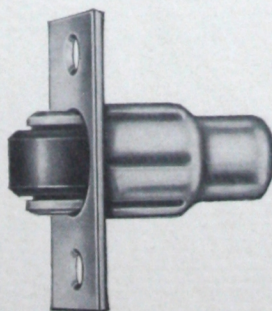
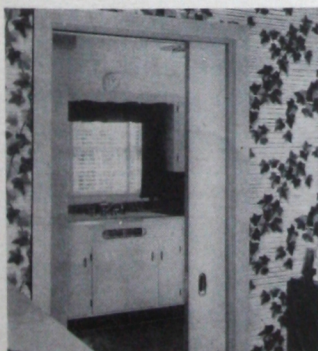




- closet bars
- blind holdbacks
- blind hinges
- double acting hinges
- sash pulleys
- storm sash adjusters
- hat holders



- screen and storm door latches
- interior residential sliding door hardware
- roller catches
- "swing-up" garage door hardware



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